IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An information processing device that decodes a multiplexed stream which includes a data stream constituted by a plurality of source packets each having a transport packet and its arrival time stamp, and in which a second picture, which is the first picture of a second multiplexed stream, is connected to a first picture, which is the last picture of a first multiplexed stream so as to be reproduced seamlessly, comprising:

output means for outputting the source packets according to the arrival time stamp of the multiplexed stream;

a video buffer for buffering video data included in the source packets;

an audio buffer for buffering audio data included in the source packets;

video decoding means for decoding the video data buffered in the video buffer; and

audio decoding means for decoding the audio data buffered in the audio buffer,

wherein the audio buffer having a capacity capable of buffering the audio data corresponding to the time required for inputting the second picture to the video buffer, said capacity being less than an additional one second of buffer capacity required to accommodate a maximum bit rate when an arrival time stamp is ignored, and

the output means continues to output the source packets according to the arrival time stamp between a time T1 and a time T2, T1 being a time at which a last video packet of the first picture of the first multiplexed stream arrives at the video buffer and T2 being a time at which a last byte is input of remaining packets of the first multiplexed stream.

Claim 2 (Original): The information processing device according to claim 1, wherein $EBn\_max=(I\_max/Rv) \times Ra$ is satisfied, where EBn_max (bits) is a capacity required for the

audio buffer; I_max (bits) is a bit amount of the second picture, Rv (bps) is an input bit rate to

the video buffer, and Ra (bps) is a bit rate of audio data.

Claim 3 (Original): The information processing device according to claim 1, wherein

the second picture is an intra-frame encoded image.

Claim 4 (Original): The information processing device according to claim 1, wherein

the audio buffer has a capacity capable of buffering the audio data corresponding to at least

100 milliseconds.

Claim 5 (Original): The information processing device according to claim 1, wherein

the multiplexed stream satisfies $STC2^2_{start} > STC2^1_{end}$, where STC_delta is a time difference

between presentation end time of the first picture on the time axis of the first multiplexed

stream and presentation start time of the second picture on the time axis of the second

multiplexed stream, $STC2^1_{end}$ (=$STC1^1_{end}$-STC_delta) is a value obtained by converting

$STC1^1_{end}$, which is the value on the time axis of the first multiplexed stream at which the last

byte of the last packet of the first multiplexed stream is output from the output means, into

the value on the time axis of the second multiplexed stream using the time difference

STC_delta, and $STC2^2_{start}$ is the value on the time axis of the second multiplexed stream at

which the first byte of the first source packet of the second multiplexed stream is output from

the output means.

Claim 6 (Original): The information processing device according to claim 1, wherein

the multiplexed stream satisfies $STC2^2_{start} > STC2^1_{end} + delta1$, where STC_delta is a time

difference between presentation end time of the first picture on the time axis of the first

multiplexed stream and presentation start time of the second picture on the time axis of the second multiplexed stream, $STC2^1_{end}$ ($=STC1^1_{end}-STC\_delta$) is a value obtained by converting $STC1^1_{end}$, which is the value on the time axis of the first multiplexed stream at which the last byte of the last packet of the first multiplexed stream is output from the output means, into the value on the time axis of the second multiplexed stream using the time difference STC_delta, and $STC2^2_{start}$ is the value on the time axis of the second multiplexed stream at which the first byte of the first source packet of the second multiplexed stream is output from the output means, wherein after a lapse of a predetermined time delta1 after the last source packet of the first multiplexed stream has been output from the output means, the first source packet of the second multiplexed stream is output from the output means.

Claim 7 (Original): The information processing device according to claim 1, wherein assuming that STC_delta is a time difference between presentation end time of the first picture on the time axis of the first multiplexed stream and presentation start time of the second picture on the time axis of the second multiplexed stream, and after a lapse of a predetermined time ATC_delta after the output of the last source packet of the first multiplexed stream has been started, the first source packet of the second multiplexed stream is output from the output means,

the predetermined time ATC_delta is so determined as to satisfy the time difference STC_delta, and the multiplexed stream is so formed as to satisfy the time difference STC_delta.

Claim 8 (Original): The information processing device according to claim 7, wherein the predetermined time ATC_delta is managed as attachment information of the first multiplexed stream.

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Claim 9 (Original): The information processing device according to claim 1, wherein audio data included in the first and second multiplexed stream is multi-channel audio data.

Claim 10 (Currently Amended): An information processing method that decodes a multiplexed stream which includes a data stream constituted by a plurality of source packets each having a transport packet and its arrival time stamp, and in which a second picture, which is the first picture of a second multiplexed stream, is connected to a first picture, which is the last picture of a first multiplexed stream so as to be reproduced seamlessly, comprising:

a step of outputting the source packets according to the arrival time stamp of the multiplexed stream;

a step of buffering video and audio data included in the source packets in video and audio buffers, respectively; and

a step of decoding the video and audio data buffered in the video and audio buffers, wherein

in the buffering step, the audio data corresponding to the time required for inputting the second picture to the video buffer is buffered in the audio buffer before the second picture is buffered in the video buffer, an audio buffer capacity being less than a capacity required to accommodate an additional one second of data at a maximum bit rate when an arrival time stamp is ignored, and

the outputting step continues to output the source packets according to the arrival time stamp between a time T1 and a time T2, T1 being a time at which a last video packet of the first picture of the first multiplexed stream arrives at the video buffer and a time T2 being a time at which a last byte is input of remaining packets of the first multiplexed stream.

Claim 11 (Original): The information processing method according to claim 10, wherein EBn_max=(I_max/Rv) × Ra is satisfied, where EBn_max (bits) is a capacity required for the audio buffer; I_max (bits) is a bit amount of the second picture, Rv (bps) is an input bit rate to the video buffer, and Ra (bps) is a bit rate of audio data.

Claims 12-13 (Canceled).

Claim 14 (Currently Amended): A computer-readable recording medium that records a program allowing a computer to decode a multiplexed stream which includes a data stream constituted by a plurality of source packets each having a transport packet and its arrival time stamp, and in which a second picture, which is the first picture of a second multiplexed stream, is connected to a first picture, which is the last picture of a first multiplexed stream so as to be reproduced seamlessly, comprising:

a step of outputting the source packets according to the arrival time stamp of the multiplexed stream;

a step of buffering video and audio data included in the source packets in video and audio buffers, respectively; and

a step of decoding the video and audio data buffered in the video and audio buffers, wherein

in the buffering step, the audio data corresponding to the time required for inputting the second picture to the video buffer is buffered in the audio buffer before the second picture is buffered in the video buffer, an audio buffer capacity being less than a capacity required to accommodate an additional one second of data at a maximum bit rate when an arrival time stamp is ignored, and

the outputting step continues to output the source packets according to the arrival time stamp between a time T1 and a time T2, T1 being a time at which a last video packet of the first picture of the first multiplexed stream arrives at the video buffer and T2 being a time at which a last byte is input of remaining packets of the first multiplexed stream.

Claim 15 (Original): The recording medium according to claim 14, wherein

$EBn\_max=(I\_max/Rv) \times Ra$ is satisfied, where EBn_max (bits) is a capacity required for the audio buffer; I_max (bits) is a bit amount of the second picture, Rv (bps) is an input bit rate to the video buffer, and Ra (bps) is a bit rate of audio data.

Claim 16 (Currently Amended): A recording medium that records a multiplexed stream which includes a data stream constituted by a plurality of source packets each having a transport packet and its arrival time stamp, wherein

the multiplexed stream is formed such that a second picture, which is the first picture of a second multiplexed stream, is connected to a first picture, which is the last picture of a first multiplexed stream so as to be reproduced seamlessly, the first and second multiplexed stream can be input to a decoder based on their respective arrival time stamps, and the input of the audio data corresponding to the time required for inputting the second picture to the decoder can be completed by the time at which the input of the second picture to the decoder is started, an audio buffer capacity being less than a capacity required to accommodate an additional one second of data at a maximum bit rate when an arrival time stamp is ignored, and

said source packets continue to be output according to the arrival time stamp between a time T1 and a time T2, T1 being a time at which a last video packet of the first picture of

the first multiplexed stream arrives at a video buffer and T2 being at which a last byte is input

of remaining packets of the first multiplexed stream.

Claim 17 (Original): The recording medium according to claim 16, wherein

(I_max/Rv) × Ra is satisfied in the audio data corresponding to the time required for

inputting the second picture to the decoder, where I_max (bits) is a bit amount of the second

picture, Rv (bps) is an input bit rate to a video buffer of the decoder, and Ra (bps) is a bit rate

of audio data.

Claim 18 (Original): The recording medium according to claim 16, wherein the

second picture is an intra-frame encoded image.

Claim 19 (Currently Amended): An information processing device that generates a

multiplexed stream which includes a data stream constituted by a plurality of source packets

each having a transport packet and its arrival time stamp, and which is read out and decoded

by a decoder based on the arrival time stamp, comprising:

video encoding means for generating a first video encoding stream to end the

presentation with a first picture and a second video encoding stream that starts the

presentation with a second picture to be presented immediately after the first picture; and

multiplexing means for multiplexing the first video encoding stream and an audio

encoding stream synchronized with the first video encoding stream to generate a first

multiplexed stream, multiplexing the second video encoding stream and an audio encoding

stream synchronized with the second video encoding stream to generate a second multiplexed

stream, and generating a multiplexed stream in which a second picture, which is the first

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picture of a second multiplexed stream, is connected to a first picture, which is the last picture

of a first multiplexed stream so as to be reproduced seamlessly, wherein

the multiplexing means multiplexes such that the input of the audio data

corresponding to the time required for inputting the second picture to the decoder can be

completed by the time at which the input of the second picture to the decoder is started, an

audio buffer capacity being less than a capacity required to accommodate an additional one

second of data at a maximum bit rate when an arrival time stamp is ignored, and

the decoder continues to output the source packets according to the arrival time stamp

between a time T1 and a time T2, T1 being a time at which a last video packet of the first

picture of the first multiplexed stream to a video buffer, time T2 being a time at which a last

byte is input of remaining packets of the first multiplexed stream.

Claim 20 (Original): The information processing device according to claim 19,

wherein

$(I\_max/Rv) \times Ra$ is satisfied in the audio data corresponding to the time required for

inputting the second picture to the decoder, where I_max (bits) is a bit amount of the second

picture, Rv (bps) is an input bit rate to a video buffer of the decoder, and Ra (bps) is a bit rate

of audio data.

Claim 21 (Original): The information processing device according to claim 19,

wherein the second picture is an intra-frame encoded image.

Claim 22 (Currently Amended): An information processing method that generates a

multiplexed stream which includes a data stream constituted by a plurality of source packets

each having a transport packet and its arrival time stamp, and which is read out and decoded

by a decoder based on the arrival time stamp, comprising:

a step of generating a first video encoding stream to end the presentation with a first

picture and a second video encoding stream that starts the presentation with a second picture

to be presented immediately after the first picture; and

a step of multiplexing the first video encoding stream and an audio encoding stream

synchronized with the first video encoding stream to generate a first multiplexed stream,

multiplexed the second video encoding stream and an audio encoding stream synchronized

with the second video encoding stream to generate a second multiplexed stream, and

generating a multiplexed stream in which a second picture, which is the first picture of a

second multiplexed stream, is connected to a first picture, which is the last picture of a first

multiplexed stream so as to be reproduced seamlessly, wherein

multiplexing is performed in the multiplexing step such that the input of the audio

data corresponding to the time required for inputting the second picture to the decoder can be

completed by the time at which the input of the second picture to the decoder is started, an

audio buffer capacity being less than a capacity required to accommodate an additional one

second of data at a maximum bit rate when an arrival time stamp is ignored, and

outputting of the source packets according to the arrive time stamp continues between

a time T1 and T2, T1 being a time at which a last video packet of the first picture of the first

multiplexed stream arrives at the video buffer and T2 being a time at which a last byte is

input of remaining packets of the first multiplexed stream.